IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OKLAHOMA

STATE OF OKLAHOMA,	)	
	)	
Plaintiff,	)	
	)	
vs.	)	
	)	Case No. 05-CV-329-GKF-PJC
TYSON FOODS, INC., et al.,	)	
	)	
Defendants.	)	

ORDER

This matter comes before the court on the State of Oklahoma's Motion in Limine to Preclude Expert Testimony of Defendants' Witness Jay Churchill [Doc. No. 2058]. Churchill is an engineer with Conestoga-Rovers & Associates ("CRA"). CRA was retained in June 2006 to monitor certain field sampling activities conducted on behalf of the State by Camp Dresser and McKee ("CDM") on contract poultry growers' farms. Churchill produced CRA's Oversight Report in February 2008 and testified at the preliminary injunction hearing. Subsequently, CRA produced a Second Report. In that report, Churchill critiqued reports of the State's experts, specifically Darren Brown's May 15, 2008, Report and Roger Olsen's May 14, 2008, Report. Churchill criticized CDM's collection and sampling, its Work Plan, its SOPs, its training of sampling personnel, and its documentation of the IRW sampling program. He opined that the Olsen Report completely ignored some of the most significant contributors of cross-contamination between soil sample depth intervals and therefore, his estimate of potential cross-contamination between soil samples is understated.

The State in its *Daubert* motion contends Churchill is not qualified to pass judgment on the adequacy of the CDM sampling program, nor are his opinions reliable.

I. Legal Standard

Federal Rule of Evidence 702 provides:

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods to the facts of the case.

Thus, Rule 702 imposes on the trial judge an important "gate-keeping" function with regard to the admissibility of expert opinions. *Ralston v. Smith & Nephew Richards, Inc.*, 275 F.3d 965, 969 (10th Cir. 2001).

First, the court must determine whether the expert is qualified by "knowledge, skill, experience, training, or education" to render an opinion. *Id.* An expert witness is qualified under Rule 702 when he possesses "such skill, experience or knowledge in that particular field as to make it appear that his opinion would rest on substantial foundation and would tend to aid the trier of fact in his search for the truth." *Graham v. Wyeth Labs.*, 906 F.2d 1399, 1408 (10th Cir. 1990).

Second, the court must ensure that the scientific testimony being offered is not only relevant, but reliable. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 589 (1993). The Tenth Circuit has stated:

> To be reliable under *Daubert,* an expert's scientific testimony must be based on scientific knowledge, which implies a grounding in the methods and procedures of science based on actual knowledge, not subjective belief or unsupported speculation. In other words, an inference or assertion must be derived by the scientific method...[and] must be supported by appropriate validation–*i.e.* good grounds based on what is known. While expert opinions must be based on facts which enable [the expert] to express a reasonably accurate conclusion as opposed to conjecture or speculation...absolute certainty is not required. The plaintiff need not prove that the expert is undisputably correct or that the expert's theory is generally accepted in the scientific community. Instead, the plaintiff must show

> that the method employed by the expert in reaching the conclusion is scientifically sound and that the opinion is based on facts which satisfy Rule 702' reliability requirements.

Dodge v. Cotter Corporation, 328 F.3d 1212, 1222 (10th Cir. 2003) (citations omitted).

In *Daubert*, the Supreme Court identified four nonexclusive factors the trial court may consider to assist in the assessment of reliability:

> (1) whether the opinion at issue is susceptible to testing and has been subjected to such testing;
>
> (2) whether the opinion has been subjected to peer review;
>
> (3) whether there is a known or potential rate of error associated with the methodology used and whether there are standards controlling the technique's operations; and
>
> (4) whether the theory has been accepted in the scientific community.

Daubert, 509 U.S. at 593-94. This list is not exclusive, and district courts applying *Daubert* have broad discretion to consider a variety of other factors. *Dodge*, 328 F.3d at 1222, citing *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 150 (1999).

To be relevant, the testimony must "assist the trier of fact to understand the evidence or to determine a fact in issue." Fed.R.Evid. 702. This consideration has been described as one of "fit." *See Daubert*, 509 U.S. at 591. "'Fit' is not always obvious, and scientific validity for one purpose is not necessarily scientific validity for other, unrelated purposes." *Id.*

In sum, the objective of the gate keeping requirement "is to ensure the reliability and relevancy of expert testimony. It is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." *Kumho Tire*, 526 U.S. at 152.

II. Analysis

A. Churchill's Qualifications

The State argues Churchill is not qualified as an expert because he has not personally drafted SOPs, conducted environmental sampling for non-point source runoff, conducted an environmental investigation of an entire watershed, conducted soil sampling for phosphorus, soil nutrient content, or bacteria content, conducted surface or groundwater sampling for phosphorus levels or nutrient levels or taken an edge-of-field sample. Thus, it concludes Churchill lacks the necessary qualifications to answer the "specific" question presented. More particularly, the State contends land application of poultry waste has contributed to the presence of elevated nutrient and bacterial levels in the water of the IRW. Since Churchill has not conducted environmental sampling in situations involving nonpoint source contamination, he is not qualified to offer an opinion in this case.

Churchill has a degree in engineering and over 20 years of professional experience in engineering, project management, design and construction oversight of environmental projects in North America and Puerto Rico. [Doc. No. 2058, Ex. A, CRA Report, p. 2]. He has collected numerous soil, sediment, surface water, groundwater, concrete core, wipe, sludge and air samples in accordance with regulatory agency-approved work plans and guidances at numerous site; he has technical expertise in the agricultural field related to conservation planning, agricultural waste management systems, land treatment practices, nutrient management, and soil and water quality. He provides project management and technical expertise to CRA's Agricultural Services Group and has been instrumental in the preparation of detailed reports, Comprehensive Nutrient Management Plans, work plans for agri-environmental projects, completion of environment assessments for agricultural operations and design review. [*Id.*, pp. 2-3].

Although Churchill has not drafted SOPs, he has drafted and implemented "sampling analysis plan[s]," which are similar to SOPs. [Doc. No. 2140, Ex. A, Churchill Dep., pp. 25-28, 38-39]. He has conducted nutrient sampling related to development of comprehensive nutrient management plans [*Id.*, pp. 28-29], and he has conducted soil sampling [*Id.*, pp. 38-39, 41]. In connection with environmental sampling, he has been trained in a range of substances, including soil, groundwater, surface water, sludge and air samples. [*Id.*, pp. 220-21].

Therefore, the court concludes Mr. Churchill is sufficiently qualified to render the opinions he has provided in his report.

B. Reliability of Churchill's Methodology

1. Analysis of State's Analytical Data

The State challenges the reliability of Churchill's methodology because he did not review or analyze the State's analytical data before rendering an opinion. Defendants contend, though, that Churchill was not retained to analyze the State's data, but rather to observe CDM's sample collection procedures. Churchill opined:

> Based on CRA's observations CDM cannot defend that the representativeness of the samples collected was not compromised due to, in part, improper sample collection procedures and improper sampling equipment decontamination procedures. Accordingly, CDM also cannot defend that the resultant analytical data are representative.

[Doc. No. 2058, Ex. A, Churchill Report, p. 31].

It is the State's burden to prove the reliability of its data. As the Tenth Circuit recognized in its order affirming the trial court's denial of the State's motion for preliminary injunction, "Any step that renders the analysis unreliable renders the expert's testimony unreliable." *Attorney General of Oklahoma v. Tyson Foods, Inc.*, 565 F.2d 769, 780 (10th Cir. 2009). Churchill's opinion attacks one step in the methodology of the State–specifically the State's sample collection

procedures. Churchill is not required to examine the results of the State's sampling procedures in order to render his opinion.

2. Compositing

The State also criticizes Churchill's methodology because it did not to take into account the impact of CDM's sample compositing process designed to minimize the risk of cross-contamination. However, Churchill has opined that the compositing process does not eliminate contamination but rather exacerbates contamination by impacting and impairing uncontaminated samples. [Doc. No. 2140, Ex. A, Churchill Dep., pp. 119-120]. Therefore, it is a point of dispute between the experts whether compositing renders the results more or less reliable.

3. Industry Standard Testimony

The State complains that Churchill offered opinions the CDM violated certain "industry standards" which have no independent verifiable basis. In his deposition, Churchill criticized the State's failure to remove manufacturer and store labels from shovels used in the sampling program, opining that removal of labels was standard industry practice. [Doc. No. 2058, Ex. B, Churchill Dep., pp. 166-67]. Apparently, there is a dispute between the parties about whether the adhesive from the removed labels could end up contaminating samples. While this might be a subject for debate among the experts, Churchill's view of whether labels should be removed does not render his methodology unacceptable.

III. Conclusion

The court concludes, based upon its review of the evidence, that Churchill is qualified to testify in this matter and his methodology passes the *Daubert* reliability test. Therefore, the State's Motion to Preclude Expert Testimony of Defendants' Witness Jay Churchill [Doc. No.

2058] is denied.

ENTERED this 12th day of August, 2009.

Gregory K. Frizzell
United States District Judge
Northern District of Oklahoma